AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application. For ease of review, certain claims, such as claims 3 and 6, are moved to a clean page to avoid a page break within a claim.

Listing of the claims

1. (Canceled)

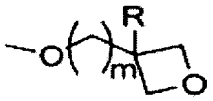
2. (Previously Presented) A macromonomer having the structure:

where ñ is a real number of 6-300,

and where X and Y each independently is a group of the formula

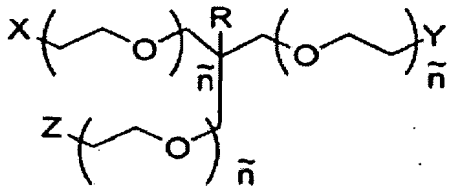
where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl,

or where X is -OH, and Y is a group of the formula



where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl.

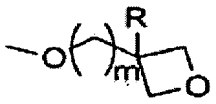
3. (Previously Presented) A macromonomer having the structure:



where R is H or alkyl or aryl or arylalkyl,

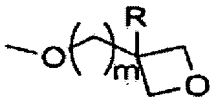
and ñ is a real number of 6-300.as defined above

and where X, Y and Z each independently is OH or a group of the formula



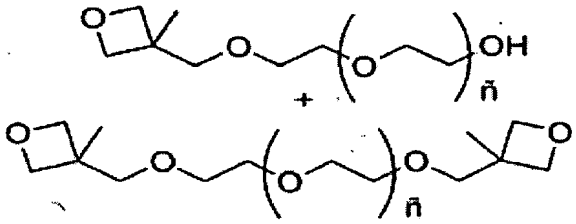
where m is an integer of 1-10, a is as defined above, and R is H or alkyl or aryl or arylalkyl;

provided that at least one of X, Y or Z is a group of the formula



where m is an integer of 1-10, a is as defined above, and R is H or alkyl or aryl or arylalkyl.

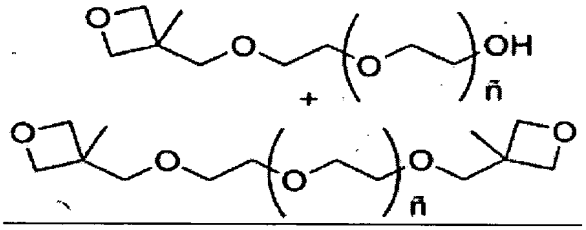
4. (Currently Amended-Withdrawn) The [[A]] macromonomer of ~~according to~~ claim 2 which is terminated by a 3-methyloxetan-3-ylmethyl ether group ~~an 3-methyloxetan-3-ylmethyl ether group~~ and has the formula:



where ñ = 6-300

~~where R and m are as defined in claim 2~~.

5. (Currently Amended) A macromonomer of claim 2, which is terminated by an 3-methyloxetan-3-ylmethyl ether group and has the formula

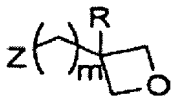


where ñ = 6-300 and

wherein the macromonomer

~~according to claim 4, which~~ has been acetylated or in other ways temporarily hydroxyl-protected on free hydroxyl groups.

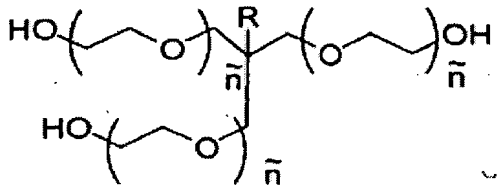
6. (Previously Presented) A process for the preparation of the macromonomer of claim 2 comprising reacting an alkali metal derivative of a polyethylene glycol having 6-300 repeating units with a halo substituted compound having the formula:



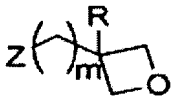
where Z is CI, Br, I, toluenesulfonyloxy or CF_3SO_3

and where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl.

7. (Previously Presented) A process for the preparation of the macromonomer of claim 3 comprising reacting an alkali metal derivative of a polyethylene glycol having the formula: -



where R is H or alkyl or aryl or arylalkyl and ñ is 6-300 with a halo substituted compound having the formula:



where Z is CI, Br, I, toluenesulfonyloxy or CF_3SO_3

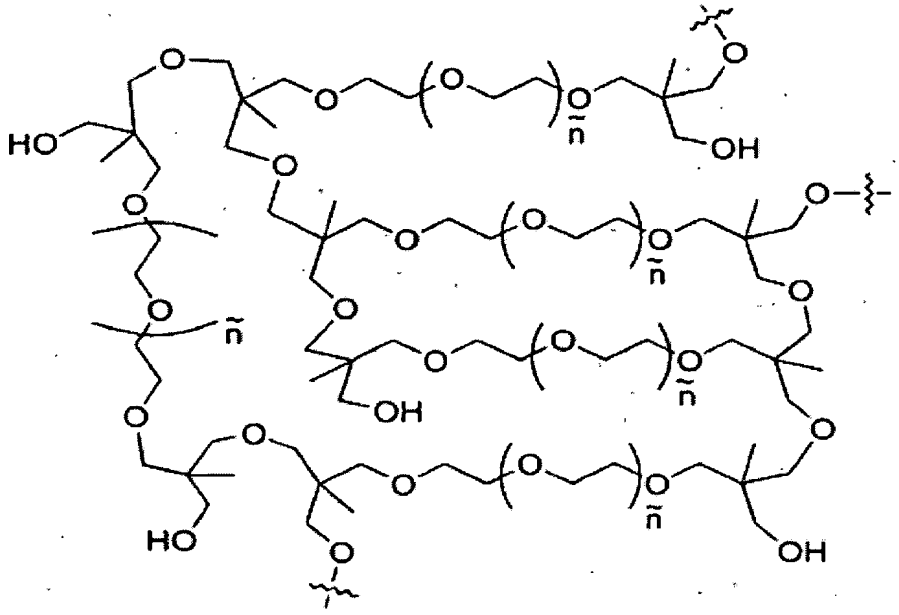
and where m is 1-10 and R is H or alkyl or aryl or arylalkyl

8. (Previously Presented) A process according to claims 6 or 3 wherein the alkali metal derivative is a sodium derivative.

9. (Previously Presented) A process according to claims 6 or 3 wherein the alkali metal derivative is a potassium derivative.

10. (Currently Amended) A cross linked polymer formed by the polymerization of a macromonomer of ~~according to~~ claim 2.

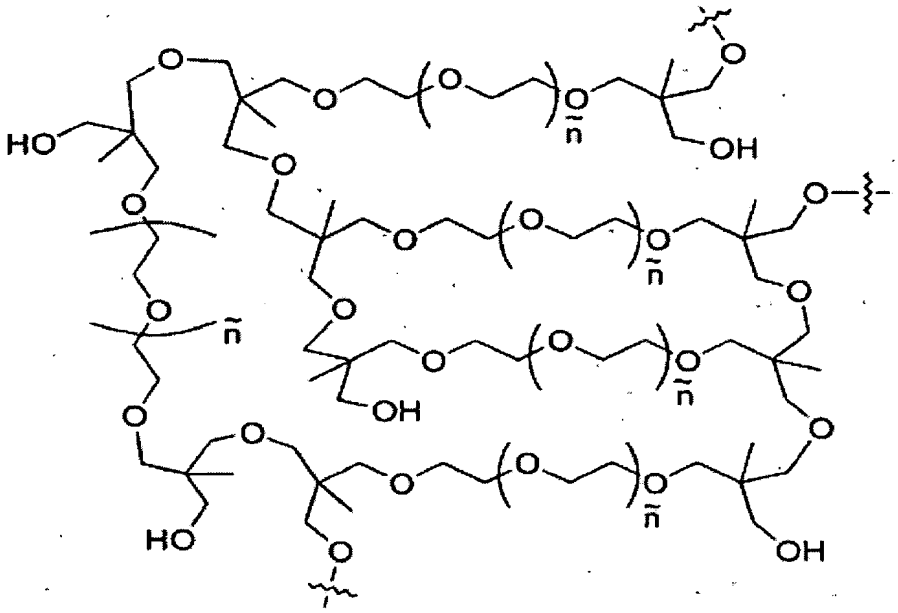
11. (Currently Amended) A cross linked polymer formed by the polymerization of a macromonomer of claim 4 ~~according to claim 10~~ wherein the ~~macromonomer has the structure claimed in claim 4, the polymerisation is initiated by a cationic catalyst and the~~ structure of the polymer is: ~~may be represented by the structure:~~



where ñ = 6-300

~~where R is as defined in claim 1~~.

12. (Currently Amended) A cross linked polymer formed by the polymerization of the macromonomer of claim 5 ,wherein ~~according to claim 10 wherein the macromonomer macromer used for its preparation has the structure of claim 5 and~~ the per-*O*-acetylated or in other ways temporarily hydroxyl-protected polymer structure is an analog of [[to]] the hydroxylated structure: ~~of claim 11 is obtained.~~



where ñ = 6-300.

13. (Currently Amended) A cross linked polymer formed by the bulk polymerization ~~polymerisation~~ of a macromonomer of claim 3.

14. (Canceled)

15.-27. (Canceled)

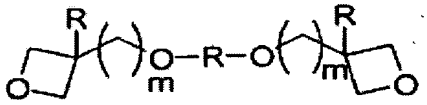
28. (Currently Amended) A beaded polymer, comprising the cross linked polymer of ~~according to~~ claim 10, claim 11, or claim 12 wherein the beaded polymer is formed by suspension polymerization in silicon oil.

29. (Currently Amended) The [[A]] beaded polymer of ~~according to~~ claim 28 where the beads are stabilized by a surfactant.

30. (Currently Amended) The [[A]] beaded polymer of ~~according to~~ claim 29 where the surfactant is obtained by radical polymerization of a mixture of acryloylated PEG-OMe and acryloyl propyl pentamethyl disiloxane.

31. (Currently Amended) The [[A]] polymer of ~~according to~~ claim 10, further comprising ~~with addition of~~ a short temporary crosslinker which can ~~may at a later point in time~~ be selectively cleaved to result in expansion of the resin.

32. (Currently Amended) The [[A]] polymer of ~~according to~~ claim 31 where the short crosslinker has the structure



where R is a alkyliden, aryliden, silane, siloxane thioether or ether bridge chemically susceptible to selective cleavage conditions.

33.-34. (Canceled)